

We claim:-

- sub A1*
1. A process for removing COS and further acidic gases from a hydrocarbonaceous fluid stream which contains CO<sub>2</sub>, COS and possibly further acidic gases, especially H<sub>2</sub>S or mercaptans, as impurities, which comprises
- intimately contacting the fluid stream in an absorption or extraction zone with a scrubbing liquor consisting of an aqueous amine solution containing from 1.5 to 5 mol/l of an aliphatic alkanolamine of from 2 to 12 carbon atoms and from 0.4 to 1.7 mol/l of a primary or secondary amine as activator,
- removing the COS essentially completely from the fluid stream, and
- separating the substantially COS-decontaminated fluid stream and the COS-loaded scrubbing liquor and discharging them from the absorption or extraction zone.
2. A process as claimed in claim 1, wherein the scrubbing liquor contains from 0.8 to 1.7 mol/l, preferably from 0.8 to 1.2 mol/l, of the activator.
- sub A2*
3. A process as claimed in either of claims 1 and 2, wherein the total amine content of the scrubbing liquor is from 20 to 70% by weight, preferably from 40 to 50% by weight.
4. A process as claimed in any of claims 1 to 3, wherein the alkanolamine used is a tertiary alkanolamine.
5. A process as claimed in claim 4, wherein the tertiary alkanolamine used is methyldiethanolamine.
6. A process as claimed in claim 4, wherein the tertiary alkanolamine used is triethanolamine.
7. A process as claimed in any of claims 1 to 6, wherein the activator used is a primary or secondary alkanolamine or a saturated 5- or 6-membered N-heterocycle which optionally contains further heteroatoms selected from oxygen and nitrogen.
8. A process as claimed in claim 7, wherein the activator is selected from the group consisting of monoethanolamine, monomethylethanolamine, diethanolamine, piperazine, methylpiperazine and morpholine.

9. A scrubbing liquor for removing COS from COS-containing hydrocarbonaceous fluid streams, comprising an aqueous amine solution containing from 1.5 to 5 mol/l of an aliphatic tertiary alkanolamine and from 0.8 to 1.7, preferably from 0.8 to 1.2, mol/l of an activator comprising a saturated 5- or 6-membered N-heterocycle which optionally contains further heteroatoms selected from oxygen and nitrogen.
10. A scrubbing liquor as claimed in claim 9, wherein the alkanolamine is a tertiary alkanolamine, preferably methyldiethanolamine or triethanolamine.
11. A scrubbing liquor as claimed in either of claims 9 and 10, wherein the activator is piperazine or methylpiperazine.

15

20

25

30

35

40

45

20820-105800